

AMENDMENTS TO THE CLAIMS

1. - 9. (Canceled)

10. (Currently Amended) A process to manufacture a sulphur-comprising asphalt paving mixture, the process comprising the steps of:

- (i) preheating bitumen at a temperature of between 120 and 180 °C to provide a hot bitumen;
- (ii) preheating aggregate at a temperature of between 120 and 180 °C to provide a hot aggregate;
- (iii) mixing the hot bitumen with the hot aggregate in a mixing unit; and
- (iv) adding a sulphur pellet ~~to said bitumen of step (i) or to said aggregate of step (ii) or to~~ said mixing unit of step (iii), wherein said sulphur pellet ~~consists essentially of~~ comprises: elemental sulphur, an H₂S-suppressant, and, optionally, a filler.

11. (Previously Presented) A process as recited in claim 10, wherein said H₂S-suppressant is present in said sulphur pellet in an amount in the range of from 0.02% to 10% (w/w), based on the total weight of said sulphur pellet.

12. (Previously Presented) A process as recited in claim 11, wherein said H₂S-suppressant is selected from the group consisting of iodine, amine compounds, copper salts, copper oxides, iron salts, iron oxides, cobalt salts and cobalt oxides.

13. (Previously Presented) A process as recited in claim 12, wherein said iron salts include ferric chloride, hydrated ferric chloride, ferrous chloride and hydrated ferrous chloride.

14. (Previously Presented) A process as recited in claim 13, wherein said filler is present in said sulphur pellet in an amount in the range of from 0.1% to 30% (w/w), based on the total weight of the sulphur pellet, and wherein said filler is a calcium-based mineral filler.

15. (Canceled)

16. (Currently Amended) A process as recited in claim 15, ~~wherein said H₂S-suppressant is present in said sulphur pellet in an amount in the range of from 0.02% to 10% (w/w), based on the total weight of said sulphur pellet~~ 10, wherein said sulphur pellet consists essentially of: elemental sulphur, an H₂S-suppressant, and, optionally, a filler.

17. (Currently Amended) A process as recited in claim 16, ~~wherein said H₂S-suppressant is selected from the group consisting of iodine, amine compounds, copper salts, copper oxides, iron salts, iron oxides, cobalt salts and cobalt oxides~~ 10, wherein said H₂S-suppressant is ferric chloride.

18. (Currently Amended) A process as recited in claim 17, ~~wherein said iron salts include ferric chloride, hydrated ferric chloride, ferrous chloride and hydrated ferrous chloride~~ 16, wherein said H₂S-suppressant is ferric chloride.

19. (Canceled)

20. (Previously Presented) A sulphur pellet composition, consisting essentially of: elemental sulphur, an H₂S-suppressant, and, optionally, a filler.

21. (Previously Presented) A sulphur pellet composition as recited in claim 20, wherein said H₂S-suppressant is present in said sulphur pellet in an amount in the range of from 0.02% to 10% (w/w), based on the total weight of said sulphur pellet.

22. (Previously Presented) A sulphur pellet composition as recited in claim 21, wherein said H₂S-suppressant is selected from the group consisting of iodine, amine compounds, copper salts, copper oxides, iron salts, iron oxides, cobalt salts and cobalt oxides.

23. (Previously Presented) A sulphur pellet composition as recited in claim 22, wherein said iron salts include ferric chloride, hydrated ferric chloride, ferrous chloride and hydrated ferrous chloride.

24. (Previously Presented) A sulphur pellet composition as recited in claim 23, wherein said filler is present in said sulphur pellet in an amount in the range of from 0.1% to 30% (w/w), based on the total weight of the sulphur pellet, and wherein said filler is a calcium-based mineral filler.

25. - 29. (Canceled)

30. (Previously Presented) A process for making a sulphur pellet, wherein said process comprises:

mixing elemental sulphur and an H₂S-suppressant by the introduction thereof, without the substantial addition of bitumen or aggregate, or both, into a mixing unit for preparing a mixture of said elemental sulphur and said H₂S-suppressant; and

forming said mixture into said sulphur pellet.

31. (Canceled)

32. (Currently Amended) A process as recited in claim ~~34~~ 30, wherein said elemental sulphur of said mixing step is added to said mixing unit in the form of a slurry comprising sulphur particles dispersed in water.

33. (Previously Presented) A process as recited in claim 32, wherein said sulphur particles have a size in the range of from about 0.5 microns to about 150 microns.

34. (Previously Presented) A process as recited in claim 33, wherein said slurry further comprises an emulsifier.

35. (Previously Presented) A process as recited in claim 30, wherein said elemental sulphur of said mixing step is added to said mixing unit in the form of molten sulphur and the mixing of said mixing step is conducted at a temperature in the range of from 115 °C to 121 °C.

36. (Currently Amended) ~~The sulphur pellet as recited in claim 1.~~ A process as recited in claim 10, wherein the H₂S-suppressant is distributed substantially homogeneously throughout the sulphur pellet.

37. (Canceled)

38. (Currently Amended) A sulphur pellet ~~comprising~~ consisting essentially of an H₂S-suppressant in an amount in the range of from 0.02% to 10% (w/w), based on the total weight of the sulphur pellet, and elemental sulphur in an amount of at least about 75 wt%, based on the total weight of the sulphur pellet.

39. (Currently Amended) The sulphur pellet according to claim 38, ~~comprising~~ consisting essentially of elemental sulphur in an amount of at least about 90 wt%, based on the total weight of the sulphur pellet.

40. (Previously Presented) The sulphur pellet according to claim 38, wherein the H₂S-suppressant is one or more compounds selected from the class of free radical inhibitors and redox catalysts.

41. (Previously Presented) The sulphur pellet according to claim 38, wherein the H₂S-suppressant is selected from the group consisting of iodine, amine compounds, copper salts, copper oxides, iron salts, iron oxides, cobalt salts and cobalt oxides.

42. (Previously Presented) The sulphur pellet according to claim 41, wherein the iron salts is an iron chloride compound selected from the group consisting of ferric chloride, hydrated ferric chloride, ferrous chloride and hydrated ferrous chloride.

43. (New) A sulphur pellet composition as recited in claim 20, wherein said H₂S-suppressant is ferric chloride.

44. (New) A process as recited in claim 30, wherein said H₂S-suppressant is ferric chloride.

45. (New) A sulphur pellet as recited in claim 38, wherein said H₂S-suppressant is ferric chloride.